



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,756	07/13/2005	Leandre Adifon	60469-193; OT-5003	5071

26584 7590 08/21/2007
OTIS ELEVATOR COMPANY
INTELLECTUAL PROPERTY DEPARTMENT
10 FARM SPRINGS
FARMINGTON, CT 06032

EXAMINER

PICO, ERIC E

ART UNIT	PAPER NUMBER
----------	--------------

3654

MAIL DATE	DELIVERY MODE
-----------	---------------

08/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,756

Applicant(s)

ADIFON ET AL.

Examiner

Eric Pico

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19 and 21-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19 and 21-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim(s) 19, 33, and 40 is/are rejected under 35 U.S.C. 102(b) as being anticipated by Hakola EP Publication No. 0646537.
3. **Regarding claim 19**, Hakola discloses an elevator system comprising:
4. a cab adapted to carry a load between different levels of a building;
5. a machine assembly 4 secured to a roof surface on the building, shown in Figure 2, and having a drive sheave 12 that causes movement of an elongated tension member 13 such that the cab moves as desired and a motor 8 that moves the drive sheave 12;
6. a cover 48, 49 removably secured over the machine assembly 4 to cover over the machine assembly 4; and
7. a support base 2 that is distinct from and secured to the roof surface, shown in Figure 2, the support base 2 supports the machine assembly 4, the cover 48, 49 being directly secured to and selectively removable from the support base 2.

Art Unit: 3654

8. **Regarding claim 33**, Hakola discloses an assembly for housing elevator system machine components on top of a roof surface of a building without requiring a machine room, comprising:

9. a support base 2 that is distinct from and adapted to be secured to the roof surface, shown in Figure 2, the support base 2 supporting the machine components 4, and a cover 48, 49 that is selectively secured to the support base 2 to cover the machine components 4 supported on the base 2.

10. **Regarding claim 40**, Hakola discloses the machine 4 comprises a motor 8 and a drive sheave 12 that rotates responsive to the motor 8 to move a tension member 13 in a manner that causes a desired elevator cab movement.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim(s) 19, 21-23, 26, 33, 35, 37-40, 43, and 44 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP Publication No. 2000-177949 in view of Hakola EP Publication No. 0646537.

13. **Regarding claim 19**, Toshiyuki et al. discloses an elevator system comprising:

14. a cab 4 adapted to carry a load between different levels of a building;

Art Unit: 3654

15. a machine assembly 14 secured to a roof surface 8 on the building and having a drive sheave that causes movement of an elongated tension member 11 such that the cab 4 moves as desired and a motor that moves the drive sheave;

16. a cover 20 removably secured over the machine assembly 14 to cover over the machine assembly 14; and

17. a support base 22 that is distinct from and secured to the roof surface 8, the support base supports the machine assembly 14.

18. Toshiyuki et al. is silent concerning the cover directly secured to and selectively removable from the support base.

19. Hakola teaches an elevator system comprising:

20. a cab adapted to carry a load between different levels of a building;

21. a machine assembly 4 secured to a roof surface on the building, shown in Figure 2, and having a drive sheave 12 that causes movement of an elongated tension member 13 such that the cab moves as desired and a motor 8 that moves the drive sheave 12;

22. a cover 48, 49 removably secured over the machine assembly 4 to cover over the machine assembly 4; and

23. a support base 2 that is distinct from and secured to the roof surface, shown in Figure 2, the support base 2 supports the machine assembly 4, the cover 48, 49 being directly secured to and selectively removable from the support base 2.

24. It would have been obvious to one of ordinary skill in the art at the time of the invention to directly secure and selectively remove the cover as taught by Hakola from

Art Unit: 3654

the support base disclosed by Toshiyuki et al. to facilitate the construction and the installation of the machine assembly.

25. **Regarding claim 21**, Toshiyuki et al. discloses the support base 22 includes a first generally planar surface and a plurality of side portions 8A extending away from surface 8 and wherein the cover 20 includes a corresponding plurality of side walls that are received against the side portions 8A when the cover 20 is secured.

26. **Regarding claim 22**, Toshiyuki et al. discloses the side portions 8A are exterior to the side walls when the cover 20 is secure to the support base 22, shown in Figure 2.

27. **Regarding claim 23**, Toshiyuki et al. discloses an controller, referred to as control panel 21, that controls the motor 14 supported beneath the cover 20.

28. Toshiyuki et al. is silent concerning the controller to be an electronic controller.

29. It would have been obvious to one of ordinary in the art at the time of the invention was made to make the controller disclosed by Toshiyuki et al. an electronic controller to easily control the motor.

30. **Regarding claim 26, 35, and 43**, Toshiyuki et al. discloses the cover has a top surface and a plurality of side walls extending away from edges of the top surface.

31. Toshiyuki et al. is silent concerning the height of the cover from the roof surface is less than one meter when the cover is secured in place.

32. It would have been obvious to one of ordinary in the art at the time of the invention was made to make the cover with a height that is less than one meter, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ (CCPA 1980).

Art Unit: 3654

33. **Regarding claim 33**, Toshiyuki et al. discloses an assembly for housing elevator system machine 14 components on top of a roof surface 8 of a building without requiring a machine room, comprising:

34. a support base 22, that is distinct from and adapted to be secured to the roof surface 8, the support base 22 supporting the machine components 14; and

35. a cover 20 that is selectively secured to cover the machine components 14 supported on the base 22.

36. Toshiyuki et al. is silent concerning the cover selectively secured to the support base.

37. Hakola teaches an assembly for housing elevator system machine components on top of a roof surface of a building without requiring a machine room, comprising:

38. a support base 2 that is distinct from and adapted to be secured to the roof surface, shown in Figure 2, the support base 2 supporting the machine components 4, and a cover 48, 49 that is selectively secured to the support base 2 to cover the machine components 4 supported on the base 2.

39. It would have been obvious to one of ordinary skill in the art at the time of the invention to selectively secure the cover disclosed by Toshiyuki et al. to the support base as taught by Hakola to facilitate the construction and the installation of the machine assembly

40. **Regarding claim 37**, Toshiyuki et al. discloses the support base 22 includes a first generally planar surface and a plurality of side portions 8A extending away from the

Art Unit: 3654

surface 8 and wherein the cover 20 includes a corresponding plurality of side walls that are received against the side portions 8A when the cover 20 is secured.

41. **Regarding claim 38**, Toshiyuki et al. discloses the side portions 8A are exterior to the side walls when the cover 20 is secured to the support base 22.

42. **Regarding claim 39**, Toshiyuki et al. discloses the cover 20 is removable.

43. Toshiyuki et al. is silent concerning the entire cover being removable.

44. It would have been obvious to one of ordinary in the art at the time of the invention was made to make the entire cover being removable to facilitate easier access to the motor and other components under the cover.

45. **Regarding claim 40**, Toshiyuki et al. discloses the machine 14 comprises a motor and a drive sheave that rotates responsive to the motor to move a tension member 11 in a manner that causes a desired elevator cab 4 movement.

46. **Regarding claim 44**, Toshiyuki et al. discloses the support base comprises a single piece 8A of material that establishes the first generally planar surface and the plurality of side portions.8A.

47. Claim(s) 24, 25, and 34 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP Publication No. 2000-177949 in view of Hakola EP Publication No. 0646537 as applied to claims 19 and 33 above, and further in view of Chida et al. U.S. Patent No. 6405834.

48. **Regarding claim 24 and 34**, Toshiyuki et al. is silent concerning the cover includes an access opening through the cover and a cover portion that selectively closes off the access opening.

Art Unit: 3654

49. Chida et al. teaches a cover, referred to maintenance operation panel 10, includes an access opening through the cover 10 and a cover portion, referred to as face plate 11, that selectively closes off the access opening.

50. It would have been obvious to one of ordinary skill in the art at the time of the invention to include an access opening and a cover portion as taught by Chida et al. to the cover disclosed by Toshiyuki et al. to facilitate access to equipment within the cover.

51. **Regarding claim 25**, Toshiyuki et al. is silent concerning the cover includes a portion that is moveable relative to another portion of the cover to provide access to at least some of the machine assembly.

52. Chida et al. teaches a cover 10 includes a portion 11 that is moveable relative to another portion of the cover 10 to provide access to a maintenance driving control apparatus.

53. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a portion as taught by Chida et al. that is moveable relative to another portion of the cover disclosed by Toshiyuki et al. to facilitate access to equipment within the cover.

54.

55. Claim(s) 27 and 36 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP Publication No. 2000-177949 in view of Hakola EP Publication No. 0646537 as applied to claims 19 and 33 above, and further in view of Semple U.S. Patent No. 5271455.

Art Unit: 3654

56. Claim(s) 27 and 36 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP Publication No. 2000-177949 in view of Semple U.S. Patent No. 5271455.

57. **Regarding claim 27 and 36**, Toshiyuki et al. is silent concerning a temperature control device associated with the machine assembly and support base for controlling the temperature within the space covered by the cover.

58. Semple teaches a temperature control device.

59. It would have been obvious to one of ordinary skill in the art at the time of the invention to associate the machine assembly and support base disclosed by Toshiyuki et al. with a temperature control device as taught by Semple to keep the elevator equipment at their operating temperatures thus reducing failure.

60.

61. Claim(s) 28 and 42 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP Publication No. 2000-177949 in view of Hakola EP Publication No. 0646537 as applied to claims 19 and 33 above, and further in view of Jones et al. U.S. Patent No. 6305499.

62. **Regarding claim 28 and 42**, Toshiyuki et al. is silent concerning tension members comprises a flat belt.

63. Jones et al. teaches tension members comprise a flat belt 16.

64. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the tension members disclosed by Toshiyuki et al. flat belts as taught by Jones et al. to facilitate traction between the tension member and sheave.

Art Unit: 3654

65.

66. Claim(s) 29 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP Publication No. 2000-177949 in view of Hakola EP Publication No. 0646537 and Jones et al. U.S. Patent No. 6305499 as applied to claim 28 above, and further in view of Kihachiro JP Publication No. 07-097157.

67. **Regarding claim 29**, Toshiyuki et al. discloses a tension member 11 and a plurality of terminations 13, 15 supporting the ends 12, 16 of the tension member.

68. Toshiyuki et al. is silent concerning a plurality of flat belts and a plurality of terminations supporting the ends of the belts, the terminations being covered by the cover.

69. Jones et al. teaches a flat belt 16 and terminations supporting the ends of the belts 16.

70. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the tension members disclosed by Toshiyuki et al. flat belts as taught by Jones et al. to facilitate traction between the tension member and sheave.

71. Kihachiro teaches a termination being covered over by a cover 3.

72. It would have been obvious to one of ordinary skill in the art at the time of the invention to fix the terminations disclosed by Toshiyuki et al. under a cover as taught Kihachiro to fix the terminations to the roof while protecting the terminations from damage.

Art Unit: 3654

73. Claim(s) 30-32 and 41 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP Publication No. 2000-177949 in view of Kihachiro JP Publication No. 07-097157.

74. Claim(s) 30-32 and 41 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP Publication No. 2000-177949 in view of Hakola EP Publication No. 0646537 as applied to claims 19 and 40 above, and further in view of Kihachiro JP Publication No. 07-097157.

75. **Regarding claim 30**, Toshiyuki et al. discloses a termination 13, 15 supporting the ends 12, 16 of the tension member 11.

76. Toshiyuki et al. is silent concerning terminations the cover covers the termination.

77. Kihachiro teaches a termination, shown in Figures 1 and 5, supporting an end of a tension member 13 and wherein a cover 3 covers the termination.

78. It would have been obvious to one of ordinary skill in the art at the time of the invention to fix the terminations disclosed by Toshiyuki et al. under a cover as taught Kihachiro to fix the terminations to the roof while protecting the terminations from damage.

79. **Regarding claim 31**, Toshiyuki et al. discloses a plurality of terminations 13, 15.

80. Toshiyuki et al. is silent concerning a plurality of tension members and a plurality of terminations with each termination being covered by the cover.

81. Kihachiro teaches tension members 13 a termination, shown in Figures 1 and 5, with the termination being covered by a cover 3.

Art Unit: 3654

82. It would have been obvious to one of ordinary in the art at the time of the invention was made to provide a plurality of tension members and a plurality of terminations to facilitate lifting of the elevator car

83. **Regarding claim 32**, Toshiyuki et al. is silent concerning the cover having a height of less than one meter.

84. It would have been obvious to one of ordinary in the art at the time of the invention was made to make the cover with a height of less than one meter because a one meter cover would be sufficiently large to cover most commonly sized hoisting machines. Further, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ (CCPA 1980).

85. **Regarding claim 41**, Toshiyuki et al. discloses terminations 12, 16 that support the ends 13, 15 of the tension members 11.

86. Toshiyuki et al. is silent concerning the termination is at least partially contained between the support base and the cover.

87. Kihachiro teaches a termination contained between a support base and a cover 3.

88. It would have been obvious to one of ordinary skill in the art at the time of the invention to fix the terminations disclosed by Toshiyuki et al. under a cover as taught Kihachiro to fix the terminations to the roof while protecting the terminations from damage.

Art Unit: 3654

Response to Arguments

89. Applicant's arguments with respect to claims 19, 21-32, and 42-44 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Pico whose telephone number is 571-272-5589.

The examiner can normally be reached on 6:30AM - 3:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EEP


SAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER